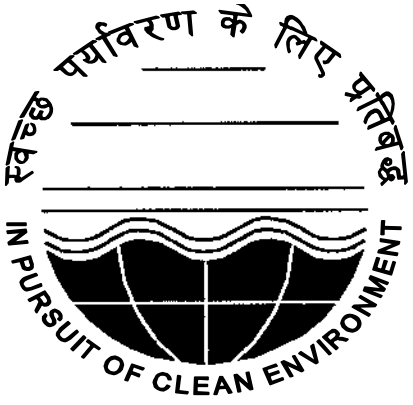
POLLUTED RIVER STRETCHES IN INDIA

CRITERIA AND STATUS



CENTRAL POLLUTION CONTROL BOARD

IDENTIFICATION OF POLLUTED RIVER STRETCHES

BACKGROUND

CPCB is monitoring the water quality in India under National Water Quality Monitoring Programme. The present monitoring network comprises of 1429 stations in 27 States and 6 Union Territories spread over the country. The monitoring network covers 293 Rivers (810 stations), 94 Lakes (102 stations), 9 Tanks, 41 Ponds, 15 Creeks/seawater, 23 Canals, 18 Drains and 411 Wells.

IDENTIFICATION OF POLLUTED RIVER STRETCHES

The water quality data for the years 2002-2008 is analysed and monitoring locations exceeding the water quality criteria are identified as polluted locations with respect to risk. Priority levels of polluted stretch is based on the risk. Risk is defined as;

RISK= FREQUENCY OF VIOLATION OF CRITERIA X CONSEQUENCE (MAGNITUDE)

The degree of violation is with respect to water quality criteria for drinking water source with conventional treatment with respect to BOD (Annexure-I- Water Quality Criteria).The polluted locations in a continuous sequence are defined as polluted river stretches.

Criteria for Priority 1

- Monitoring locations exceeding BOD concentration 30 mg/l has been considered as it is the standard of sewage treatment plant and in river it appears without dilution.(River locations having water quality exceeding discharge standards for BOD to fresh water sources)
- All monitoring locations exceeding BOD concentration 6 mg/l on all occasions.
- Monitoring locations exceeding 3 mg/l BOD are not meeting desired water quality criteria but does not affect to Dissolved Oxygen level in water bodies. If BOD exceeds 6mg/l in water body, the Dissolved Oxygen is reduced below desired levels.
- The raw water having BOD levels upto 5 mg/l are does not form complex chemicals on chlorination for municipal water supplies. Hence the water bodies having BOD more than 6 mg/l are considered as polluted and identified for remedial action.
- List of identified stretches enclosed.

Criteria for Priority 2

- Monitoring locations having BOD between 20-30 mg/l.
- All monitoring locations exceeding BOD concentration 6 mg/l on all occasions.
- List of identified stretches enclosed.

Criteria for Priority 3

- Monitoring locations having BOD between 10-20 mg/l.
- All monitoring locations exceeding BOD concentration 6 mg/l on all occasions.
- List of identified stretches enclosed.

Criteria for Priority 4

- Monitoring locations having BOD between 6-10 mg/l.
- List of identified stretches enclosed.

Criteria for Priority 5

- Monitoring locations having BOD between 3-6 mg/l.
- The locations exceeding desired water quality of 3mg/l BOD.
- List of identified stretches enclosed.

OUTCOME:- The priority wise number of river stretches are given below:-

Priority	**Number of Stretches**
Priority 1	35
Priority 2	15
Priority 3	26
Priority 4	38
Priority 5	36
Total	**150**

ANNEXURE-I

Approach to Water Quality Management

The water quality management in India is performed under the provision of Water (Prevention and Control of Pollution) Act, 1974. The basic objective of this Act is to maintain and restore the wholesomeness of national aquatic resources by prevention and control of pollution. The Act does not define the level of wholesomeness to be maintained or restored in different water bodies of the country. The Central Pollution Control Board (CPCB) has tried to define the wholesomeness in terms of protection of human uses, and thus, taken human uses of water as base f or identification of water quality objectives for different water bodies in the country.

It was considered ambitious to maintain or restore all natural water body at pristine level. Planning pollution control activities to attain such a goal is bound to be deterrent to developmental activities and cost prohibitive. Since the natural water bodies have got to be used for various competing as well as conflicting demands, the objective is aimed at restoring and/or maintaining natural water bodies or their parts to such a quality as needed for their best uses.

Thus, a concept of "designated best use" (DBU) was developed. According to this concept, out of several uses a water body is put to, the use which demands highest quality of water is termed as "designated best use", and accordingly the water body is designated. Primary water quality criteria for different uses have been identified. A summary of the use based classification system is presented in table -1.

Table:1- Use based classification of surface waters in India

Designated-Best-Use	Class of water	Criteria
Drinking Water Source without conventional treatment but after disinfection	A	1. Total Coliforms OrganismMPN/100ml shall be 50 or less 2. pH between 6.5 and 8.5 3. Dissolved Oxygen 6mg/l or more 4. Biochemical Oxygen Demand 5 days 20^{o}C 2mg/l or less
Outdoor bathing (Organised)	B	1. Total Coliforms Organism MPN/100ml shall be 500 or less 2. pH between 6.5 and 8.5 3. Dissolved Oxygen 5mg/l or more 4. Biochemical Oxygen Demand 5 days 20^{o}C 3mg/l or less
Drinking water source after conventional treatment and disinfection	C	1. Total Coliforms Organism MPN/100ml shall be 5000 or less 2. pH between 6 to 9 3. Dissolved Oxygen 4mg/l or more 4. Biochemical Oxygen Demand 5 days 20^{o}C 3mg/l or less

Propagation of Wild life and Fisheries	D	1. pH between 6.5 to 8.5 2. Dissolved Oxygen 4mg/l or more 3. Free Ammonia (as N) 1.2 mg/l or less
Irrigation, Industrial Cooling, Controlled Waste disposal	E	1. pH between 6.0 to 8.5 2. Electrical Conductivity at 25^{o}C micro mhos/cm Max.2250 3. Sodium absorption Ratio Max. 26 4. Boron Max. 2mg/l

The entire water resources of the country were classified according to their designated best uses and a "Water Use Map" was prepared. For identification of the water bodies or their parts where water quality is at variance with water quality criteria, it was felt important to measure water quality of that water body or its part. It would help in preparation of "Water Quality Map" of India. The idea was to superimpose "Water Quality Map" on "Water Use Map" to identify the water bodies or their parts, which are in need of improvement (restoration). Subsequently through a wide network of water quality monitoring, water quality data are acquired. A large number of water bodies were identified as polluted stretches for taking appropriate measures to restore their water quality. Today almost all policies and programmes on water quality management are based on this concept including the Ganga Action Plan and National River Action Plans.

POLLUTED RIVER STRETCHES (BOD>30mg/l and BOD exceeding 6mg/l on all occassions)				
River	**Polluted Stretch**	**Source/Town**	**Monitoring Location**	BOD (mg/l)
ANDHRA PRADESH				
1. Musi	• D/s Hyderabad & Rangareddy	Hyderabad & Secundrabad	1.Nagole, Rangareddy	34
			2. Hyderabad D/s	23
2. Nakkavagu	• D/s Medak	Medak	1.Bachugudem, Medak	50
ASSAM				
3. Bharalu	• D/S Guwahati	Guwahati Sewage	1.D/S Guwahati	31.5
4. Kalong	• D/s of Nagaon (Elangabeel System)	Nagaon- Sewage	1. Elangabeel System Pond	50
CHANDIGARH				
5. Patiala ki Rao	• Patiala Ki Rao	Chandigarh	1.Patiala Ki Rao	50
6. Attawa Choe	• Attawa Choe (N-Choe)	Chandigarh	2.Attawa Choe (N-Choe)	50
7. Sukhna Choe	• Sukhna Choe	Chandigarh	3.Sukhna Choe	50
DELHI				
8. Yamuna	• Wazirabad to Okhla	Industrial & Domestic Waste from Delhi	1.Nizamuddin	55
			2.Okhla Bridge	32
			3.D/S Of Okhla A/C Shahdara Drain	70
GUJARAT				
9. Sabarmati	• Ahmedabad to D/S of Vautha	Discharge from Meshwa & Ahemdabad	1. After Conf. With Meshwa At Vautha (Near Dhokla),	48
			2. At Ahmedabad At V.N. Bridge,	31
			3. At Vill. Miroli Taluka Dascroi, Ahmedabad	103
			4. At railway Bridge,Ahmedabad	29
			5. At Kheroj Bridge	12
			6. At Hansol Bridge	15
10. Amlakhadi	• Along Ankeshwar	Industrial & Domestic waste from Ankeshwar	1.Amlakhedi after confluence of wastewater from Ankleshwar	46
11. Bhogavo	• Surendranagar		1.D/s of Surendranagar	50
12. Daman Ganga	• Vapi D/S to Confl. with sea	Industrial & Domestic waste from Vapi,Salvas,Daman & Kachigaon	1.Kachi Gaon D/s	30
HARYANA				
13. Ghaggar	• Interstate border of Punjab & Haryana to Ottu wier at Sirsa	Industrial & Municipal waste from Patiala, Derabassi, Sirsa	1. Before Ottu Weir (Before Mixing Of Satluj Canal Water)	50
			2. Gh-1 At Road Brdg. Sirsa,Debwali Road	33.2
			3. Gh-2 At Chandarpur Syphon,	40
			4. Near Bankarpur, Dera Bassi	22
			5. U/S Dhakansu Nallah	21
14. Markanda	• Kala Amb to Narayan Garh	Industrial & Domestic waste	1.Kala Amb D/S	590

		from Kala Amb		
15. Western Yamuna Canal	• D/s of Yamuna Nagar	Yamuna Nagar Industrial & Domestic wastewater	1.100 metre D/s after receiving Industrial & Sewage effluent	247
			2.At Damla d/s of Yamuna Nagar	188
HIMACHAL PRADESH				
16. Sukhna	• D/s Parwanoo	Parwanoo sewage	1.At Parwanoo, Solan	36
MADHYA PRADESH				
17. Khan	• Indore	Indore Sewage	1.Sakkar Khadi (Near Indore)	50
			2.Sanwer	50
			3.Kabit Khedi	50
18. Chambal	• Nagda D/s	Industrial & domestic wastewater of Grasim Township & Nagda	1.Nagda D/s	34
MAHARASHTRA				
19. Bhima	• Vithalwadi to Takli	Pune – Sewage	1. Pune, D/S Of Bundgarden	40
		Daunt -Sewage	2. Pune U/S Vithalwadi	28.2
			3. Pargaon (After confluence with Mule Martha)	16
20. Godavari	• Nashik D/s to Paithan	Nasik Sewage	1.Nashik D/s	36
			2.Jayakwadi Dam, Raher	6.5
			3.U/S Of Gangapur Dam, Nasik	6
			4.U/s of Paithan, Jayakwadi	6.8
			5.D/s of Paithan, Pathegaon	7.4
			6.Near Someshwar Temple	7.5
			7.Hanuman Ghat, Nashik	9
			8. Nasik D/S	18
			9.Panchavati At Ramkund	12
			10.KapilaGodavari, confl.Point, Tapovan	14
			11.Saikheda	16
			12. Tapovan	20
21. Mula & Mutha	• D/s Pune city	City Sewage of Pune	1.Mula-Mutha River at Mundhawa Bridge	36
			2.Mula at Aunth Bridge	
			3.Mula –Harrison Bridge	50
			4.Mutha at sangam Bridge	32
22. Pawana	• Pune-Sangavi Gaon	Pune Sewage	1.Pune-Sangavi Gaon	36
23. Indrayani	• Alandi to confluence with Bhima	Pune Sewage	1.Alandi Gaon	36
24. Koyna	• Karad D/s	Karad Sewage	1.At Karad	35.5
25. Mithi	• Mumbai Stretch	Mumbai	1. Mithi river	50
26. Kundalika	• Are Khurd	Roha sewage	1.Are Khurd	50
			2. Kundalika At Roha city	6.5
PUNJAB				
27. Satluj	• D/S of Zenith Paper Mill to	Sewage from Ludhiana &	1.100m D/S Budha Nala	48

	Bridge Harike, Amritsar	Jalandhar	Confl.,Ludhiana	
			2. D/S East Bein	6.2
			3.Boat Bdg. Dharmkotnakodar Road, Jalandhar	18
			4. 1 Km. D/S of Zenith	22
28. Ghaggar	• Mubarkpur to Sardulgarh (Entire length in Punjab)	Municipal & Industrial discharge from Patiala, Chandigarh, Sukhna paper mills & Derra Bassi, Sardulgarh, Moonak,	1.D/S Dhakansu Nallah	32
			2.D/S Jharmal Nadi	32
			3.D/S Sardulgarh	45
			4.100m D/S Conf. With R. Saraswati (Patiala)	40
			5.Ratanheri, D/S Of Patiala Nadi (After Confl.)	50
			6.Moonak,	38
			7.U/S Jharmal Nadi,	40
			8.U/S Sardulgarh,	45
			9.D/s Chhatbir	10
			10. Mubarakpur Rest House(Patiala)	10
			11. Near Bankarpur, Dera Bassi	12
			12. U/s Dhakanshu Nallah	18
TAMIL NADU				
29. Adyar	• Along Chennai	Chennai- Industrial & Municipal Wastewater	Nandambakkam, Ekattuthangal, Jaferkhanpet, Maraimalai bridge, Kotturpuram bridge, Boat club	43
30. Coovum	• Along Chennai	Chennai- Industrial & Municipal wastewater	Annanagar, Arumbakkam, Amanjikarai, Poonamalle, College Road, Central Jail, Napier Bridge	105
31. Cauvery	• Erode D/s	Erode Sewage	1.Erode near Chirapalayam	38
UTTAR PRADESH				
32. Yamuna	• Kosi Kalan to Juhika	Sewage from Agra, Mathura, Bateshwar, Vrindavan & Etawah	1.D/S Of Agra, U.P.	33
			2.Mazawali	37
			3.Bateswar, U.P	26
			4.Etawah, U.P.	27
			5.Mathura U/S , U.P.	20
33. Hindon	• Saharanpur to confluence with River Yamuna	Sewage & Industrial	1.Ghaziabad D/S, U.P.	36
		effluent from Ghaziabad, Saharanpur & Muzaffarnagar	2. Confl. With R. Krishni & Kali Near Binauli Town, Meerut	36
			3.Pura mahadev	34
			4. Saharanpur D/s	24
34. Western Kali	• Muzaffar Nagar to Confluence with Hindon	Sewage & Industrial effluents from Muzaffar nagar & Mansoorpur	1.Kalinadi At U/S Of Muzaffar Nagar 2.Kalinadi At D/S Of Muzaffar Nagar	32 364
35. Kali Nadi	• Kannauj	Industrial and Municipal sewage	1. At Kannauj (Before Conf.)	120

Eastern		from Meerut,Modinagar, Bulandsahar, Hapur, Gulaothi and Kannauj	2. U/S Of Gulaothi Town In Bulandsahar,	183
POLLUTED RIVER STRETCHES(BOD between 20 & 30 mg/l)				
River	**Polluted Stretch**	**Source/Town**	**Monitoring Location**	**BOD (mg/l)**
KARNATAKA				
1. Bhadra	• D/s of Bhadravathi to confluence with Tunga	Industrial & Domestic	1.D/S Of Bhadravathi	22.5
		Waste water from Bhadravathi	2. D/s of KIOCL Road Bridge, Near Holehunnur	7.8
MAHARASHTRA				
2. Tapi	• M.P. Border to Bhusaval	Bhusaval Sewage	1.Ajnand Village	21
			2.Uphad Village	22
			3. Bhusawal U/s	19
3. Girna	• Malegaon to Jalgaon	Malegaon Sewage	1.Malegaon (Manmad)	23
		Jalgaon Sewage	2. Jalgaon	10
4. Nira	D/s of Jubilant Organosis, Pune	Industrial wastewater	1. D/s of Jubilant Organosis, Pune	21. 2
MANIPUR				
5. Nambul	• Hump Bridge to Heirangoithong	Sewage	1. Heirangoithong	24
			2. Hump Bridge	26
RAJASTHAN				
6. Jojari	• Along Jodhpur	Industrial & Domestic waste from Jodhpur	1.D/S Jodhpur	10.5-25.1
7. Bandi	• Along Pali	Industrial & Domestic waste from Pali	1.D/S Pali	30-141
8. Berech	• D/S of Udaipur	Industrial & Domestic waste from Udaipur and Chittorgarh	1.D/S Udaipur	6.2-22.1
9. Khetri	• Along Khetri	Industrial & Domestic waste from Khetri	1.D/S Khetri Complex	8.1-31.2
TAMIL NADU				
10. Noyyal	• Along coimbatoor, Tirupur, Palyanakotti	Industrial & domestic wastewater from coimbatoor, Tirupur, Palyanakotti	1.Vicinity of Tirupur	>26
UTTAR PRADESH				
11. Bagad	• D/S of Gajraula	Industrial effluent of Jubilant organics	1.D/s of Jubilant Organics	BOD - >26
12. Ganga	• Kannauj D/S to Kanpur D/s(Jajmau Pumping station	Industrial effluent from Kanpur	1.Kanpur D/S(Jajmau Pumping Station	21
			2. Kannauj D/s, U.P.	6
			3.Kanpur U/s(Ranighat), U.P.	6.4
UTTARAKHAND				
13. Kosi	• D/S of Kashipur	Sewage & Industrial waste from Kashipur	1.D/S of Kahsipur	13
14. Dhela & Kichha	• D/S of Kashipur	Sewage & Industrial waste from Kashipur	1.Dhela D/S of Kashipur	187
			2.Kichha D/S of Kashipur	17
15. Bahalla	• D/S of Kashipur	Sewage & Industrial waste from Kashipur	1.D/S of Kashipur	15-22

POLLUTED RIVER STRETCHES(BOD between 10 & 20 mg/l)				
River	**Polluted Stretch**	**Source/Town**	**Monitoring Location**	**BOD (mg/l)**
ANDHRA PRADESH				
1. Manjira	• D/s Gowdicharla	Industrial effluent of Ganpati sugar & Impact of Nakavagu	1.Gowdicharla a/c with Nakavagu	16
			2.Near Ganpati sugars	18
ASSAM				
2. Deepar Bill	• D/s Guwahati	Guwahati	1.Deepar Bill	11
GUJARAT				
3. Khari	• Lali village, Ahemdabad	Municipal & Industrial waste from Ahemdabad	1.Lali Village Near Ahmedabad	19
4. Kolak	• D/s Patalia.		1.At Patalia Bdg.	12
			2. At Railway Bridge No. 313 Vapi,Valsad	8
5. Mindhola	• D/s State Highway Bridge Sachin		1.Mindhola At State Highway Bridge Sachin	12
6. Shedi	• Along Kheda	Kheda Sewage	1. At Kheda	19
HARYANA				
7 Gurgaon Canal	• D/s of Delhi	Delhi	1. GC-1 Near Badarpur Border	24
JHARKHAND				
8 Subarnrekha	• D/s of Ranchi (Tatisilwal)	Industrial & domestic waste from Ranchi	1.Ranchi(tatisilwal)	10. 5
			2. Namkum Road bridge	6.8
KARNATAKA				
9 Tunga	• D/S of Shimoga	Shimoga Sewage	1.D/S Of Shimoga Town	13.5
10 Tungabhadra	• Harihar D/S to Hara eahalli Bridge. & Ullanur	Harihar Sewage & Grasim waste	1.Haralahalli Bridge	16.5
11 Laxmantirtha	• D/s of Hunsur Town	Hunsur Sewage	1.D/s of Hunsur town	10
KERALA				
12 Karamana	• Karamana At Moonnattumukku		1.Karamana At Moonnattumukku	11
MADHYA PRADESH				
13 Kshipra	• Ujjain to confluence with Chambal	Ujjain- sewage	1.Ramghat At Ujjain,	15
			2.Trivenisangam (1 Km. D/S Of Sangam)	14
			3.Siddhawat D/S of Ujjain	8
14 Narmada	• Hoshangabad	Industrial & Domestic Wastewater	1.Hoshangabad D/s	11.4
MAHARASHTRA				
15 Weinganga	• D/S Ashti	Municipal sewage of Ashti town	1.At Ashti	10.5
			2.After Confluence of Kanhan	9
			3. D/s of Ellora Paper mill	9.4
			4.U/s of Ellora paper mill	8.6
			5.U/s of Gaurav paper mills, Jackwell	9

			6. D/s of Gaurav paper mills, Jackwell	7.8
16 Wardha	• Along Rajura village	Paper mill waste	1.Rajura Bridge	11
			2.D/s of ACC Ghuggus	13
			3.At confluence point of Pangange & Wardha at Jaud	8.5
17 Bhima	• Narsinghpur D/s	Nira – discharge	1. Narsinghpur,(D/SAfter.Confl.With R.Nira),	16.2
18 Krishna	• Dhomdam to Kolhapur	Sewage & Industrial waste from Karad & Sangli	1. Krishna Bridge, Karad,	11. 6
			2. At Kshetra Mahuli	12
			3. Krishna Vennasangam at Mahuli	17.6
			4. At Wai	12.6
			5. Mahabaleshwar Dhom Dam Near Koina Dam,	8.6
19 Purna	• Andura village		1. D/s of confl. of Morna & Purna, Andura village	10.2
			2. Purna at Dhupeshwar	
20 .Nira	• Along Pulgaon	Pulgaon Cotton Mill	1.Pulgaon Cotton Mill, Wardha	11.8
			2.Sarole Bdg.On Pune-Banglore Highway	
21 Chandrabhaga	• Along Pandharpur Town	Sewage Of	1. D/S Of Pandharpur Town	12
		Pandharpur Town	2. U/S Of Pandharpur Town	10.5
22. Venna River	• Varye, Satara		1. Satara D/s	12
TRIPURA				
23. Agartala Canal	• D/s Agartala	Agartala sewage	1.Near Pragati Vidyabhawan, Agartala,	14.6
UTTAR PRADESH				
24. Gomti	• Lucknow to Jaunpur	Sewage & Industrial effluent from Lucknow and Jaunpur.	1. Jaunpur D/S, U.P.	12
			2. Lucknow D/S, U.P.	14
25. Ganga	• Varanasi D/S	Discharge through Kalinadi & Ramganga sewage & Industrial effluent from Kannauaj and Kanpur	1.Varanasi D/S (Malviya Bridge)	14
26. Ramganga	• Upstream Kannauj	Sewage & Industrial waste water from Ramnagar & Moradabad	1.Ramganga At Kannauj (Before Conf.)	16

POLLUTED RIVER STRETCHES (BOD Between 6-10 mg/l)				
River	**Polluted Stretch**	**Source/Town**	**Monitoring Location**	**BOD (mg/l)**
ANDHRA PRADESH				
1. Krishna	• Wadepally		1.Krishna at Wadepally A/c with River Musi	8
2. Godavari	• D/S of Rajamundary	Rajamundary	1.Rajamundary D/S	6
3. Maner	• Warangal U/S	Warangal	1.Warangal U/s	6.1
ASSAM				
4. Burhidihing	• Margherita to Duliajan	Margherita	1.Burhidihing At Margherita	7.9
			2.Burhidihing at Duliajan	7
BIHAR				
5. Sikrana	• Sikrana At Chanpatiya	**Chanpatiya**	1.Chanpatiya	8
CHATTISGARH				
6. Arpa	• Arpa river D/S of Bilaspur	Bilaspur	1.D/S Bilaspur	7
7. Seonath	U/S Rajnandgaon		1.U/S Rajnandgaon	7.1
GUJARAT				
8. Mahi	• D/s Sevalia and Vasad	Municipal waste from Sevalia & Vasad	1.Vasad	6.8
			2.Near Rajasthan border at Kadana Dam	8.2
9. River Dhadar	• D/s Kothada	Kothada	1.River Dhadar At Kothada	9
10. Tapi	• Rander Bridge to Surat	Municipal & Industrial waste from Surat	1.Rander Bridge, Surat	7.4
			2.Tapi at ONGC bridge, Surat	6
11. Kim	• D/s Surat	Municipal Sewage	1.Sahol Bridge, Olpad Hansol Road, Surat	6
HIMACHAL PRADESH				
12. Markanda	• D/S of Paonta Sahib	Water from Paonta Sahib	1.Markanda At Paonta, Distt. Sirmour	8.2
13. Beas	• D/S of Mandi	Domestic waste from Mandi	1. D/s Mandi	7.6
JHARKHAND				
14. Sankh	• Along Bolba	Municipal Sewage	1.Bolba	6.2
KARNATAKA				
15. Kali	• Along Dandeli Town	West Coast Paper Mill waste	1.D/S West Coast Paper Mill	7
16. Krishna	• U/S Of Ugarkhurd Barrage		1. U/S Of Ugarkhurd Barrage	9.8
MADHYA PRADESH				
17. Tons	• Tons Along Madhavgarh	Sewage	1.Tons At Madhavgarh	8
18. Kalisot	• Mandideep	Sewage & industrial effluent	1.Near road bridge, Mandideep	6
19. Betwa	• Raisen	Sewage from Raisen	1.At Nayapur D/s, Mandideep Industrial Area No.1, Raisen	6.8
MAHARASHTRA				
20. Kalu	• Atale village to Confl. with Ulhas	Municipal & Industrial waste water	1.Atale village	7.5
21. Kanhan	• D/S Nagpur	Industrial & Domestic Waste of	1.D/S of Nagpur	8.8

		Nagpur	2.U/s of M/s Vidharbha paper mill, Sinora	8.8
			3.D/s of M/s Vidharbha paper mill, Sinora	9.8
22. Kolar	• Along Kamptee	Municipal waste water	1.Before Confluence To Kanhan At Kamptee	7
23. Ulhas	• Mohane	Industrial & Domestic runoff Ulhasnagar	1.U/S Of Nrc Bund At Mohane	6
			2.Jhambul Water Works	7.5
24. Panchganga	• Kolhapur	Industrial & Municipal sewage of Kolhapur	1.D/S Of Kolhapur Town	6.4
25. Patalganga	• Khopoli to Esturaine region	Industrial & Municipal sewage from khopoli, Rasayani & Paundh	1. Shilphata	6
			2. Near Intake Of Midc W/W	9
26. Rangavali	• Along Navapur	Sewage of Navapur	1.D/S Of Navapur	8.4
MEGHALAYA				
27. Kharkhala	• Near Sutnga Khlieri,Jaintia Hills		1.Near Sutnga Khlieriat,Jaintia Hills Dt.	7
28. Umtrew	• Umtrew At Byrnihat East		1.Umtrew At Byrnihat East	7.7
ORISSA				
29. Kathjodi	• Along Cuttack	Cuttack Sewage	1.Cuttack D/S	6.4
PONDICHERRY				
30. Arasalar	• Along Karaikal	Domestic waste of Karaikal	1.Arasalar River Karaikal Region,	7
RAJASTHAN				
31. Chambal	• D/S Kota city	Industrial & Domestic waste from Kota	1.Kota D/S (2 Km. From City)	6.2
TAMIL NADU				
32. Vaigai	• Along Madurai	Madurai-Industrial & domestic wastewater	1.Vicinity of Madurai	>6
33. Tambiraparani	• Along Ambasamudam	Madura Coats Indusitrial waste	1.Rail Bdg. Nr. Ambasamudam	6
34. Cauvery	• Tiruchirapalli to Grand Anaicut	Municipal sewage of Erode, Tiruchirapalli	1.Tiruchirappalli D/S	6
			2.Trichy,Grand Anaicut	7.8
			3.1Km D/s of Bhavani river confluence	7.3
35. Bhavani	• Bhavani	Municipal sewage	1.Bhavani Sagar Bhavani	7.6
			2..Bhavani at Bhavani	6.8
UTTAR PRADESH				
36. Ganga	• D/s of Haridwar		1.D/s of Haridwar	7.6
WEST BENGAL				
37. Damodar	D/s Asansol		1.Narainpur After Confl. Of Nunia Nallah	6.8
			2.Near Mujher Mana Village After Conf. of Tamla Nallah	6.8
38. Ganga	D/s Dakshineshwar	Industrial waste & sewage from Dakshineshwar	1.Dakshineshwar	6

POLLUTED RIVER STRETCHES (BOD between 3& 6 mg/l)			
River	**Polluted Stretch**	**Monitoring Location**	**BOD (mg/l)**
ANDHRA PRADESH			
1. TUNGABHADRA	• D/s Manthralayam	1. Manthralayam , Kurnool	3.3
2. KRISHNA	• Thangadi , Mahaboobnagar	1. Thangadi , Mahaboobnagar	3.1
3. PENNAR	• Puspagini,	1. A/C Papagni, Puspagini	3.2
CHHATTISGARH			
4. MAHANADI	• Rajim U/s to interstate boundary with Orissa	1.U/s Rajim	3.2
		2.Interstate Boundry	3.1
GUJARAT			
5. MAHI	• D/s Mujpur	1. At Umeta Bridge	3.1
		2. At Mujpur	3.2
6. PANAM	• D/s Lunawada	1. At Lunawada	3.7
7. SABARMATI	• Dharoi Dam to Mahudi jain Temple	1. Dharoi Dam	3
		2. At Mahudi Jain Temple	3.5
8. AMBIKA	• D/s Bilimora	1. At Bilimora	4.2
9. ANAS	• D/s Dahod	1. Anas At Dahod,(Kushalgarh),Dist. Panchmahal	3.8
10. BALESHWAR KHADI	•	1. Baleshwar Khadi At N.H. No. 8	4.5
11. KAVERI	•	1. Bridge At Billimora-Valsad Road	3
HARYANA			
12.YAMUNA	• Kalanaur to Sonepat	1.Hathnikund	3
		2. At Kalanaur	4
		3. At Sonepat	5
		4. U/s Paonta Sahib	3
KARNATAKA			
13 TUNGABHADRA	• Ullanur D/s	1. At Ullanur	3.1
14 HUNDRI	• Joharpur D/s	1. Joharpur(V), Near Temple, Kurnool	3.1
15 KUNDU	• Nandayal D/s	1. Nandyal, Near Over Bdg., Kurnool	3.1
16 ARKAVATI	• D/s of Kanakapura	1. D/S of Kanakapura Town	5
17 MALPRABHA	• D/s of Khanapur	1. D/S of Khanapur Village	4.1
KERALA			
18 PUZHACKAL	•	1. At Puzhackal Bridge	4
19 KADAMBAYAR	• D/s Brahmapuram	1. At Brahmapuram	3
MADHYA PRADESH			
20 NARMADA	• Hoshangabad D/s	1.at Sethanighat	3.1
		2. at Hoshangabad	3.2
21 MANDAKINI	• D/s Chitrakut	1. At Chitrakut	5

MAHARASHTRA			
22 ULHAS	• Along Badlapur	1. U/s of Badlapur,	3.4
23 BHATSA	• Along Pise village	1. D/s of Pise Dam Near Pise Village (Ulhas)	3.3
NAGALAND			
24 DHANSIRI	• Along Dimapur	1. Near Check Gate (Dimapur Khutkhuti Road)	3.2
		2. Full Nagarjan	3.6
		3. Nuton Basti	4.8
		4. Town Boundary Bridge (Diphu Road)	3.2
ORISSA			
25 BRAHMANI	• Panposh to Rourkela	1.D/s Panposh	4.6
		2.Rourkela D/s	3
26 MAHANADI	• Cuttack D/s	1.Cuttack D/s	4.6
27 KUAKHAI	• Along Bhubaneshwar	1. At Bhubaneshwar	3.2
SIKKIM			
28 TEESTA	• D/s Gangtok	1. After confluence with River Ranichu at Singtam	3
		2. After confluence with Rangichu after meeting the industrial effluents from the Town Ranichu	3.1
		3. At Melli downstream	3.2
29 RANICHU	• D/s Gangtok	1. Before confluence with River Teesta at Singtam	3.5
		2. After confluence of Ranichu and Rorachu at Ranipool	3.2
30 DIKCHU	• D/s Gangtok	1. Before confiuence with River Teesta Near NHPC Hydroelectric Power Project	3.4
31 MANEY KHOLA	• D/s Gangtok	1. After Confluence with Ray Khola at Adampool after meeting waste of STP	3.2
		2. At Burtuk near Army Base Camp, 4 Km U/s of Gangtok	3.2
TAMILNADU			
32 PALAR	• Along Vellore	1. Vaniyambadi Water Supply Head Work	4
TRIPURA			
33 HAORA	• Agartala D/s	1. Chandrapur, Agartala D/s of Haora	3.5
UTTAR PRADESH			
34 SARYU	• Along Ayodhya	1. At Ayodhya at main Bathing Ghat	3
35 RIHAND	• Along Renukut	1. Renukut U/S	3.3
		2. Renukut D/S	3.2
WEST BENGAL			
36 BARAKAR	• D/s Asansol	1. At Asansol (Water Intake Point)	3.8